

ABSTRACT

A marine, flexible, integrated umbilical (for control, injection or production) is disclosed. The umbilical (10) comprises a number of fluid flow pipes (7; 7'; 7'') and optionally electric conductors (8; 8'), a filler material between the fluid flow pipes and the possible electric conductors. The filler material comprises several inner and outer channel elements (2, 3, 4; 6, 9; 6', 9') being twisted about the longitudinal axis of the umbilical and assembled such that they form channels (11; 11'; 11'') for receiving the fluid flow pipes and the possible electric conductors. An outer sheath (1; 1'; 1'') of suitable material is present outside the filler material. An armouring and weight applying band is wrapped around the filler material and is laid between the filler material and the outer sheath (1; 1'; 1'') in the finished umbilical (10).